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REMARKS

Claims 1-29 are pending in the present application. No claims are added, cancelled or amended in this response. In the Office Action mailed September 20, 2005, the Examiner rejected claims 1-20 and allowed claims 21-29. Applicant respectfully traverses the rejections in response to this Office Action.

The Examiner rejected claims 1, 2, 4, 5, 11, 12, 14, and 15 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art in view of Vanghi.

Claim 1 recites a method of providing outer loop power control in a communication system having discontinuous transmission (DTX) detection comprising "determining a compensation factor on the basis of a known non-zero $P(D/E)$ value". Applicants respectfully submit that this step is not discussed in the Background of the present application nor taught or suggested by Vanghi. Vanghi teaches a method where a target SNR values are based on the number of decoded frames. (Column 2, lines 24-31). Vanghi does not teach or suggest determining a compensation factor based on $P(D/E)$ value. As explained in the specification of the present application, a $P(D/E)$ value is a value representing the probability of declaring a DTX when an event was an Erasure event. Therefore, the $P(D/E)$ value is the probability that a mobile station actually sent a frame but the frame was decoded with bit errors such that the DTX detection algorithm erroneously indicated a DTX. Nowhere within Vanghi is a discussion of DTX or the $P(D/E)$. Accordingly, applicant respectfully submits that the references, neither individually nor in combination, teach or suggest "determining a compensation factor on the basis of a known non-zero $P(D/E)$ value" and that claim 1 is allowable.

Regarding claims 2-7, these claims depend from claim 1 which applicant submits is allowable. Accordingly, applicant respectfully submits that these claims are allowable as depending from an allowable base claim.

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Claim 11 recites a wireless communication device having discontinuous transmission (DTX) detection and outer loop power control comprising "means for determining a compensation factor on the basis of a known non-zero $P(D/E)$ value". Applicants respectfully submit that this element is not discussed in the Background of the present application nor taught or suggested by Vanghi. As discussed above, Vanghi has no discussion of DTX or $P(D/E)$ values.

Regarding claims 12-16, these claims depend from claim 11 which applicant submits is allowable. Accordingly, applicant respectfully submits that these claims are allowable as depending from an allowable base claim.

Further regarding claims 4 and 14, these claims recite that the $P(D/E)$ is determined dynamically. The Examiner cited to column 2 lines 20-30 of Vanghi for support that this element is shown in Vanghi. After careful review of this section, however, it is clear that the metric N in Vanghi indicates whether information decoded in the received signals contains errors. N does not indicate the probability of declaring a DTX when an event was an Erasure event. Accordingly, applicant respectfully submits that neither the Background of the present application, nor Vanghi, nor a combination of the two, teaches or suggests every element of either claim 4 or claim 14.

The Examiner rejected claims 3 and 13 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art in view of Vanghi in further view of Love. Applicant respectfully submits that no combination of the art of record teaches or suggests every element of either claim 3 or claim 13.

Claims 3 and claim 13 recite a method and a device, respectively, where "the known non-zero $P(D/E)$ is a constant value". The Examiner cited to column 6, lines 23-34 of Love for support that this element is shown in Love. After careful review of this section, however, it is clear that Love refers to the probability of erasure and not the probability of declaring a DTX when an event was an Erasure event. Accordingly, applicant respectfully submits that neither the Background of the present application, nor Vanghi, nor Love, nor any combination of the three, teaches or suggests a devices where a power control setpoint is based on a known non-zero $P(D/E)$ that is a constant value.

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The Examiner rejected claims 6, 7, 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art in view of Vanghi in further view of Dominique.

Applicants respectfully submit that neither the Background of the present application, nor Vanghi, nor Dominique, nor any combination of the three teach or suggest every element of any one of claims 6, 7, 16 or 17. Claims 6 and 7 depend from claim 1 and claims 16 and 17 depend from claim 11. As discussed above, neither the Background of the application nor Vanghi teaches or suggests determining a compensation factor on the basis of a known non-zero P(D/E) value. Applicant respectfully submits that Dominique does not teach or suggest this element. Nowhere within Dominique is discussion of basing an outer loop power control on a probability of declaring a DTX event when an event was an erasure of frame.

The Examiner rejected claims 8-10 and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Dominique. Applicant respectfully submits that no combination of the art of record teaches or suggests every element of any one of claims 8-10 or 18-20.

Claim 8 recites a method comprising "in response to the detection of consecutive DTX occurrences, lowering a power control setpoint associated with the outer loop power control." As explained by the Examiner on page 5, of the Office Action, "[d]etecting consecutive DTX occurrences and in response to the detection of consecutive DTX occurrences, lowering a power control setpoint associated with the out loop power control is not specifically disclosed in Dominique". Applicants respectfully submit that there is no suggestion or motivation in Dominique to modify Dominique to lower a power control setpoint associated with the outer loop power control in response to the detection of DTX occurrences as claimed. The Examiner stated that Dominique disclosed a power threshold for normal communications and, another, lower threshold for DTX mode. After careful review of the sections cited, it is clear that Dominique does not teach a lower power control setpoint threshold for DTX mode. The Examiner cited to Column 2, lines 18-24 and 30-34. Column 2, lines 18-24 discusses base stations and mobile stations following a protocol to allocate resources and column 2, lines 30-34

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discusses soft handoffs and continuous transmission. At column 3, lines 27-30, however, Dominique discusses how DTX occurrences are detected. The DTX threshold in Dominique is not the power control setpoint associated with outer loop power control. The DTX threshold in Dominique determines when an event is characterized as a DTX occurrence. The power control setpoint determines the FER by adjusting the power level of the transmitting device. The Examiner cited to column 3, lines 18-24 for support that the motivation is suggested in Dominique. This section of Dominique, however, merely points out that between DTX transmissions no signals are transmitted and does not provide a suggestion that power setpoint is lowered. On the contrary, the Background of Dominique teaches away from the claimed invention by explicitly stating that "once DTX mode is declared, the outer loop power control is suspended and thus the transmission level of the transmitted signals is not adjusted." (Column 3, lines 41-43).

Regarding claims 9 and 10, these claims depend from claim 8 which applicant submits is allowable. Accordingly, applicant respectfully submits that these claims are allowable as depending from an allowable base claim.

Claim 18 recites a wireless communication device having discontinuous transmission (DTX) detection and outer loop power control comprising "means for detecting consecutive DTX occurrences" and "means for lowering a power control setpoint associated with the outer loop power control on the basis of at least the detecting". As stated by the Examiner on page 6 of the Office Action, these elements are not specifically disclosed in Dominique. Applicants respectfully submit that there is no suggestion or motivation in Dominique to modify Dominique to include a means for detecting a consecutive DTX occurrences or a means for lowering a power control setpoint associated with the outer loop power control on the basis of at least the detecting as claimed. The Examiner stated that Dominique disclosed a power threshold for normal communications and, another, lower threshold for DTX mode. As discussed above with reference to Claim 8, applicant respectfully submits that DTX threshold in Dominique is not a power control setpoint that two different setpoints are not disclosed in Dominique. The Examiner also cited to Column 3, lines 18-24 for support that Dominique included motivation to modify the

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disclosed system. As discussed above with reference to claim 8, applicant respectfully submits that Dominique does not suggest a lower a power control setpoint and there is no motivation or suggestion to modify in Dominique.

Regarding claims 19 and 20, these claims depend from claim 18 which applicant submits is allowable. Accordingly, applicant respectfully submits that these claims are allowable as depending from an allowable base claim.

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REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 1/20/06

By: 

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